

INDEX

<u>Practical Name</u>	<u>Date</u>	<u>Signature</u>
1.Program to Convert Lowercase To Uppercase and Uppercase to Lowercase		
2.Program implementing Concatenation of Strings		
3.Program to print real and imaginary part of a Complex Number		
4.Program to Convert Temperature from Fahrenheit to Celsius and Vice-Versa		
5.Program to Calculate Simple Interest and Compound Interest		
6.Program to print n even numbers using while loop		
7.Program implementing Basic Arithmetic operations		
8.Program to print greatest amongst three numbers		
9. Program to Check whether a number is prime or not		
10.Program to print Fibonacci series		

1.Program to Convert Lowercase To Uppercase and Uppercase to Lowercase

```
str1="ram"  
str2="RaJkiYa Engineering college"  
print("Printing in Uppercase:")  
print(str1.upper())  
print(str2.upper())  
print("\n")  
print("Printing in Lowercase:")  
print(str1.lower())  
print(str2.lower())
```

Output:

Printing in Uppercase:

RAM

RAJKIYA ENGINEERING COLLEGE

Printing in Lowercase:

ram

rajkiya engineering college

2.Program implementing Concatenation of Strings

```
str1="Rajkiya"  
str2="Engineering"  
str3="College"  
str4="is"  
str5="situated"  
str6="in"  
str7="Azamgarh"  
str=str1+" "+str2+" "+str3+" "+str4+" "+str5+" "+str6+" "+str7  
print(str)
```

Output:

Rajkiya Engineering College is situated in Azamgarh

3.Program to print real and imaginary part of a Complex Number

```
x=10+2j
```

```
y=10-2j
```

```
z=1+3j
```

```
a=2.0+3.2j
```

```
b=1+2.4j
```

```
c=23+0j
```

```
print(x.real,x.imag)
```

```
print(y.real,y.imag)
```

```
print(z.real,z.imag)
```

```
print(a.real,b.imag)
```

```
print(c.real,c.imag)
```

Output:

```
10.0 2.0
```

```
10.0 -2.0
```

```
1.0 3.0
```

```
2.0 2.4
```

```
23.0 0.0
```

4.Program to Convert Temperature from Fahrenheit to Celsius and Vice-Versa

```
print("Celsius to Fahrenheit Converter")  
  
print("\n")  
  
Fahrenheit = int(input("Enter a temperature in Fahrenheit: "))  
  
Celsius = (Fahrenheit - 32) * 5.0/9.0  
  
print("Temperature:", Fahrenheit, "Fahrenheit = ", Celsius, " C")  
  
print("\n")  
  
print("Celsius To Fahrenheit Converter")  
  
print("\n")  
  
Celsius = int(input("Enter a temperature in Celsius: "))  
  
Fahrenheit = 9.0/5.0 * Celsius + 32  
  
print("Temperature:", Celsius, "Celsius = ", Fahrenheit, " F")
```

Output:

Celsius to Fahrenheit Converter

Enter a temperature in Fahrenheit: 56

Temperature: 56 Fahrenheit = 13.333333333333334 C

Celsius To Fahrenheit Converter

Enter a temperature in Celsius: 23

Temperature: 23 Celsius = 73.4 F

5.Program to Calculate Simple Interest and Compound Interest

```
def compound_interest(principle, rate, time):
```

```
    CI = principle * (pow((1 + rate / 100), time))
```

```
    print("Compound interest is", CI,"Rs")
```

```
def simple_interest(principle,rate,time):
```

```
    SI=(principle*rate*time)/100
```

```
    print("Simple interest is", SI,"Rs")
```

```
compound_interest(10000, 10.25, 5)
```

```
simple_interest(10000, 10.25, 5)
```

Output:

Compound interest is 16288.946267774416 Rs

Simple interest is 5125.0 Rs

6.Program to print n even numbers using while loop

```
num = int(input("Enter a range upto which you want even numbers: "))
```

```
i=0
```

```
while i<=num:
```

```
    if i%2==0:
```

```
        print(i)
```

```
    i=i+1
```

Output:

Enter a range upto which you want even numbers: 20

0

2

4

6

8

10

12

14

16

18

20

7.Program implementing Basic Arithmetic operations

```
import math

x=25

y=3

print(x+y)      #Addition
print(x-y)      #Subtraction
print(x*y)      #Multiplication
print(x**y)     #Exponentiation
print(x/y)      #Division
print(x//y)     #Floor Division
print(x%y)      #Modulo
print(math.sqrt(x)) #Square Root
```

Output:

28

22

75

15625

8.333333333333334

8

1

5.0

8.Program to print greatest amongst three numbers

```
a=input("Enter first number : ")  
b=input("Enter second number : ")  
c=input("Enter third number : ")
```

```
if a>b and a>c:
```

```
    print("Greatest Number = ",a)
```

```
elif b>a and b>c:
```

```
    print("Greatest Number = ",b)
```

```
else:
```

```
    print("Greatest Number = ",c)
```

Output:

Enter first number : 45

Enter second number : 23

Enter third number : 56

Greatest Number = 56

9. Program to Check whether a number is prime or not

```
number = int(input("Enter any number: "))  
if number>1:  
    for i in range(2, number):  
        if (number % i) == 0:  
            print(number, "is not a prime number")  
            break  
    else:  
        print(number, "is a prime number")  
else:  
    print(number, "is not a prime number")
```

Output 1:

Enter any number: 67

67 is a prime number

Output 2:

Enter any number: 10345678

10345678 is not a prime number

10: Program to print Fibonacci series

```
nterms = int(input("How many terms you want? "))
n1 = 0
n2 = 1
count = 2
if nterms <= 0:
    print("Plese enter a positive integer")
elif nterms == 1:
    print("Fibonacci sequence:",n1)
else:
    print("Fibonacci sequence:")
    print(n1,",",n2,end=', ')
    while count < nterms:
        nth = n1 + n2
        print(nth,end=', ')
        # update values
        n1 = n2
        n2 = nth
        count += 1
```

Output:

How many terms you want? 9

Fibonacci sequence:

0 , 1 , 1 , 2 , 3 , 5 , 8 , 13 , 21 ,